

## INTERNATIONAL SEARCH REPORT

International application No.

PCT/JP2004/009837

A. CLASSIFICATION OF SUBJECT MATTER  
Int.Cl<sup>7</sup> H04B10/04

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)  
Int.Cl<sup>7</sup> H04B10/00-10/28, H04J14/00-14/08Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched  
Jitsuyo Shinan Koho 1922-1996 Toroku Jitsuyo Shinan Koho 1994-2004  
Kokai Jitsuyo Shinan Koho 1971-2004 Jitsuyo Shinan Toroku Koho 1996-2004Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)  
IEEE Explore

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

| Category* | Citation of document, with indication, where appropriate, of the relevant passages  | Relevant to claim No. |
|-----------|---|-----------------------|
| X<br>Y    | JP 10-13353 A (Matsushita Electric Industrial Co., Ltd.),<br>16 January, 1998 (16.01.98),<br>Full text; all drawings<br>(Family: none)  | 1-3, 9, 11<br>4-6, 10 |
| Y         | Masahiko KOBAYASHI et al., "Sado FM Henchoko o Mochiita FM Ikkatsu Henkangata Hikari Eizo Densoyo Hikari Soshinki", The Institute of Electronics, Information and Communication Engineers Koen Ronbunshu, Vol.1998, Society B2, 29 September, 1998 (29.09.98), page 448 | 4, 10                 |

 Further documents are listed in the continuation of Box C. See patent family annex.

\* Special categories of cited documents:

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- "E" earlier application or patent but published on or after the international filing date
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"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

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"&" document member of the same patent family

Date of the actual completion of the international search  
05 October, 2004 (05.10.04)Date of mailing of the international search report  
26 October, 2004 (26.10.04)Name and mailing address of the ISA/  
Japanese Patent Office

Authorized officer

Facsimile No.

Telephone No.

**INTERNATIONAL SEARCH REPORT**International application No.  
PCT/JP2004/009837**C (Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT**

| Category* | Citation of document, with indication, where appropriate, of the relevant passages   | Relevant to claim No. |
|-----------|--|-----------------------|
| Y         | JP 2001-119097 A (Nippon Telegraph And Telephone Corp.), 27 April, 2001 (27.04.01), Full text; all drawings (Family: none) | 5, 6                  |